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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,548	07/27/2001	Charles N. Harper	Serie 5684	8550
40582	7590	11/03/2006	EXAMINER	
AIR LIQUIDE 2700 POST OAK BOULEVARD, SUITE 1800 HOUSTON, TX 77056			OYEBISI, OJO O	
			ART UNIT	PAPER NUMBER
			3692	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,548

Applicant(s)

HARPER, CHARLES N.

Examiner

OJO O. OYEBISI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/18/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

In the amendment filed on 08/18/06, the following have occurred: Claims 1-20 have been cancelled, new claims 21-40 have been added, and claims 21-40 remain pending in this office action. Further, the amendment has necessitated the withdrawal of claim rejections under 35 U.S.C 101 and 35 U.S.C 112, second paragraph.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as it was originally filed does not provide support for the invention as is now claimed, i.e., identifying, by a supply chain optimizer, **a potential production configuration** for the production supply chain for a supply chain operator capable of both consuming and selling electricity while operating the production supply chain, wherein **the potential production configuration** reduces a production output and energy consumption for at least some portion of the production supply chain during a time period where a contracted price for the electricity exceeds a forecasted price for the electricity, and wherein production supply chain operator may acquire the electricity at the contracted price; determining,

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using a potential action valuation model, whether to reduce the production output of the production supply chain according to **the potential production configuration** to create the excess energy capacity for the production supply chain during the time period; and if production output is determined to be reduced, selling the excess energy capacity created by implementing **the potential production configuration** during the time period. More specifically, the specification, as originally filed, does disclose a **potential action valuation model** generates value for potential, predefined operational actions at a given production facility in response to a particular opportunity, not a **potential production configuration** for the production supply chain for a supply chain operator capable of both consuming and selling electricity....., as implied in claims 21, 28, and 35.

Further, claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims cite different models i.e., "a contract valuation model", "a financial position management model", "a potential action valuation model" "a forecasting and planning model", "a risk management model", "a supply chain optimizer model", for use in supporting business units decision-making. Thus since claims are interpreted in light of the specification, the examiner turns to the specification to find out detailed description of how these models are created or set up to carry out their intended use. However, there is not a single paragraph in the specification that describes how these

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aforementioned business models are set up or created to carry out/help shape their intended use. The applicant mentions in page 5 last paragraph of the present application that "the decision support system may comprise one or more elements such as a plurality of **interconnected models** wherein each model is operable for producing decision support. The plurality of interconnected models may comprise one or more models such as a contract valuation model for generating a value for existing and potential contracts for the electrical power, a potential action valuation model for generating a value for potential, predefined operation actions at a given production facility, a supply chain optimizer, a financial management model for use in managing ongoing use of financial positions related to energy commodities, a risk management model to allow entry of risk tolerance parameters, and a forecasting and planning model which supplies commodity forecast information to the contract valuation model and the financial position model." However, the applicant fails to describe how these interconnected models are set up, developed, created, or programmed to carry out the intended use. Thus the applicant's claim are very broad and vague, there is essentially no direction provided by the inventor.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 21-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Takriti (US PAT : 6,021,402).

Re claim 21. Takriti discloses a computer-implemented method for identifying an excess energy capacity in a production supply chain, comprising: identifying, by a supply chain optimizer, a potential production configuration for the production supply chain for a supply chain operator capable of both consuming and selling electricity while operating the production supply chain (see abstract), wherein the potential production configuration reduces a production output and energy consumption for at least some portion of the production supply chain during a time period where a contracted price for the electricity exceeds a forecasted price for the electricity, and wherein production supply chain operator may acquire the electricity at the contracted price; determining, using a potential action valuation model, whether to reduce the production output of the production supply chain according to the potential production configuration to create the excess energy capacity for the production supply chain during the time period; and if production output is determined to be reduced, selling the excess energy capacity created by implementing the potential production configuration during the time period (i.e., Fourth, to avoid any blackouts, utilities make sure that, at each period, the maximum operating capacity of their system exceeds the demand of this period by a certain amount. This excess capacity is called "spinning reserves". To clarify the concept of spinning reserves, assume that our system has ten generators of which seven are on line at the current time period. Let us also say that the forecasted demand at this period is 12,000 MWH. In an optimal solution, the total generation would be

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close to 12,000 MWH. However, if the maximum capacity of our operating units; i.e., the total capacity when each unit is operating at G.sub.i,t, is close to 12,000 MWH, our system cannot take any unexpected increase in the demand. In other words, the reliability of our system is low. The reliability can be improved by forcing the total maximum capacity of the operating units to exceed the expected demand by a certain amount of power. This excess capacity is the spinning reserves and is indicated by r.sub.t.sub.s. There are other reserve constraints that can be enforced to improve reliability. The treatment of such constraints is very similar to our treatment of spinning reserves, see col.12 line 63 through col.13 line 33).

Re claim 22. Takriti further discloses the method, wherein the potential action valuation model determines whether to reduce the production output of the production supply chain using a risk management model (see fig.2 element 111 and fig.3).

Re claim 23. Takriti further discloses the method, wherein the risk management model may be configured according to a set of risk tolerance criteria and risk performance criteria (i.e., What distinguishes our tool is that it allows the user to incorporate risk, through predictions of the load and fuel prices, and uses these predictions to create optimal schedules. Our tool uses hedging strategies to produce robust schedules that minimize cost and manage risk efficiently, see col.8 lines 60-65) .

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Re claim 24. Takriti further discloses the method, wherein the forecasted price for electricity during the time period is determined using a forecasting and planning model utilizing historical and real-time data (see col.8 lines 32-65).

Re claim 25. Takriti further discloses the method, wherein, if production output is determined to be reduced, prior to the time period, increasing the production output of the supply chain to prepare of the reduced production of the supply chain for the time period (i.e., Fourth, to avoid any blackouts, utilities make sure that, at each period, the maximum operating capacity of their system exceeds the demand of this period by a certain amount. This excess capacity is called "spinning reserves". To clarify the concept of spinning reserves, assume that our system has ten generators of which seven are on line at the current time period. Let us also say that the forecasted demand at this period is 12,000 MWH. In an optimal solution, the total generation would be close to 12,000 MWH. However, if the maximum capacity of our operating units; i.e., the total capacity when each unit is operating at G.sub.i,t, is close to 12,000 MWH, our system cannot take any unexpected increase in the demand. In other words, the reliability of our system is low. The reliability can be improved by forcing the total maximum capacity of the operating units to exceed the expected demand by a certain amount of power. This excess capacity is the spinning reserves and is indicated by r.sub.t.sub.s. There are other reserve constraints that can be enforced to improve reliability. The treatment of such constraints is very similar to our treatment of spinning reserves, see col.12 line 63 through col.13 line 33).

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Re claim 26. Takriti further discloses the method , wherein a data delivery engine is configured to supply real-time data (i.e., data generator, see fig.2 element 114 ad 111, see fig.3, also see fig.4 element 41) to the potential action valuation model, the supply chain optimizer, the forecasting and planning model, and the risk management model

Re claim 27. Takriti further discloses the method, wherein the real-time data includes real-time commodity prices for electricity (i.e., an estimate of the price of electricity in the open market, see col.5 lines 2-5).

Re claims 28 and 35. Claims 28 and 35 recite similar limitations to claim 21 above and thus rejected using the same art and rationale as in claim 21.

Re claims 29 and 36. Claims 29 and 36 recite similar limitations to claim 22 above and thus rejected using the same art and rationale as in claim 22.

Re claims 30 and 37. Claims 30 and 37 recite similar limitations to claim 23 above and thus rejected using the same art and rationale as in claim 23.

Re claims 31 and 38. Claims 31 and 38 recite similar limitations to claim 24 above and thus rejected using the same art and rationale as in claim 24.

Re claim 32. Claim 32 recites similar limitations to claim 25 above and thus rejected using the same art and rationale as in claim 25.

Re claim 33. Claim 33 recites similar limitations to claim 26 above and thus rejected using the same art and rationale as in claim 26.

Re claims 34 and 39. Claims 34 and 39 recite similar limitations to claim 27 above and thus rejected using the same art and rationale as in claim 27.

Response to Arguments


Applicant's arguments with respect to claims 21-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OJO O. OYEBISI whose telephone number is (571) 272-8298. The examiner can normally be reached on 8:30A.M-5:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HYUNG S. SOUGH can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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